

In the previous note there seemed to be a correlation of better mass resolutions when the svx hits were missing in the track.

In this note we look at phi distributions with and without svx hits using data event selections for $J/\psi \Rightarrow e\bar{e}$, $\mu\bar{\mu}$ and $D^* \Rightarrow D^0, D^0 \Rightarrow K\pi$.

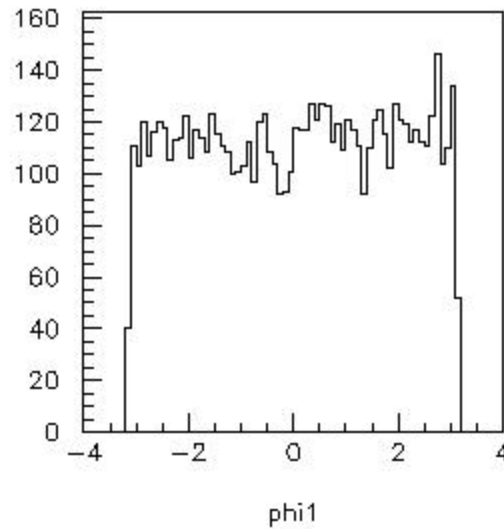
The distributions show that the tracks missing svx hits occur preferentially at $\phi = 0$ and π . This would indicate that the resolutions become worse for track in the $\phi = \pi/2$ and $-\pi/2$ directions.

Note that the leptons from the J/ψ are fairly back to back hence they may accentuate problems. The K and π tracks from the D^0 are less back to back in phi, but still show that the svx hits are missing in the $\phi = 0$ and π directions.

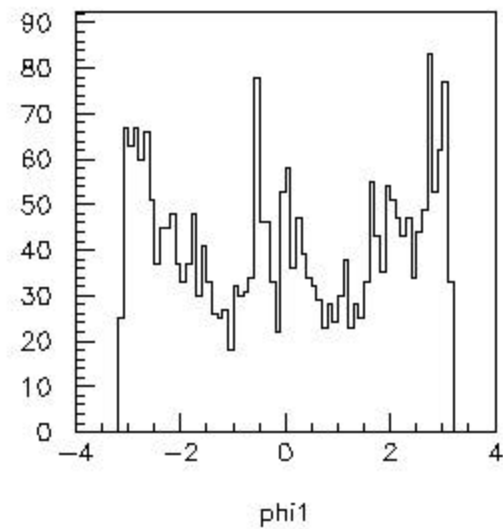
J/psi => ee
preselection

-e track

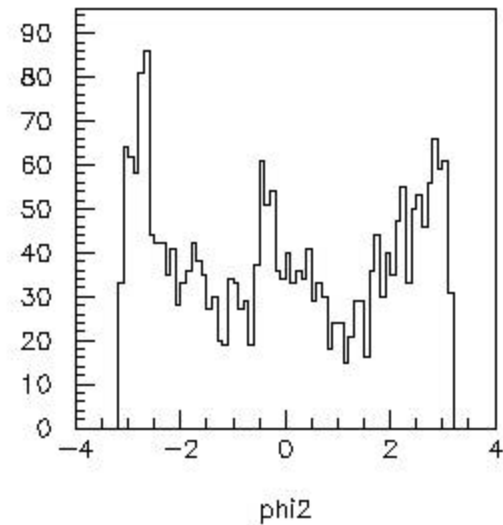
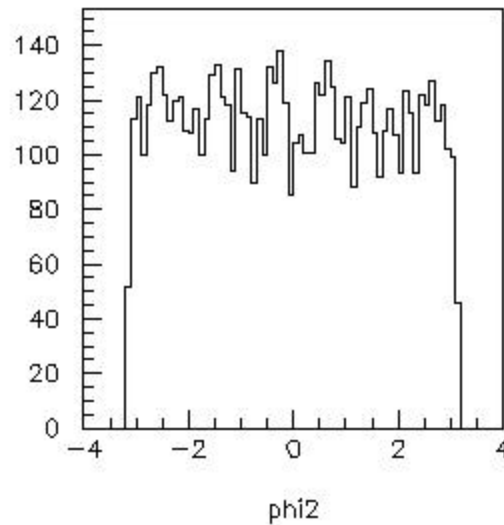
Phi angle, no cut



Phi angle, no svt M



+e track



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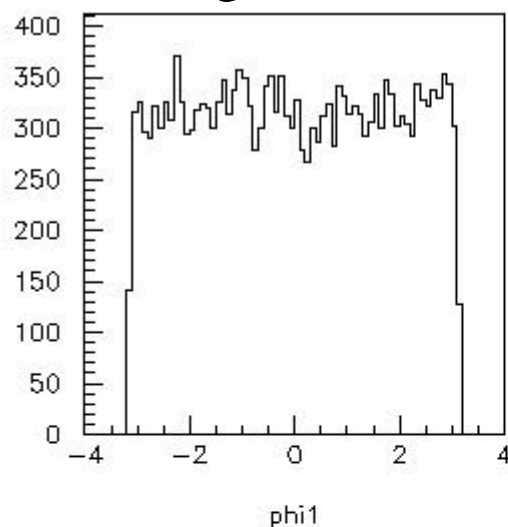
s
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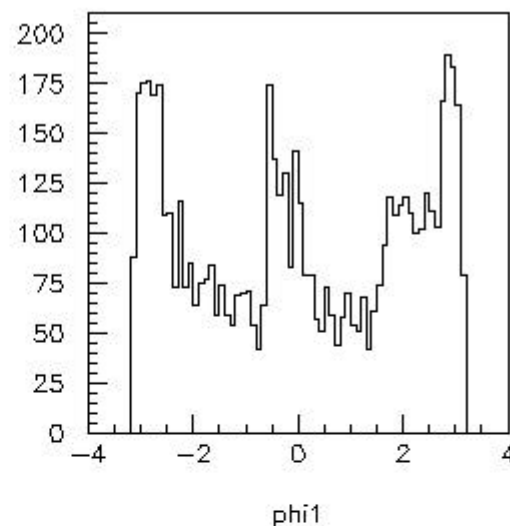
$J/\psi \Rightarrow \mu\mu$
selection

$-\mu$ track

Phi angle, no cut

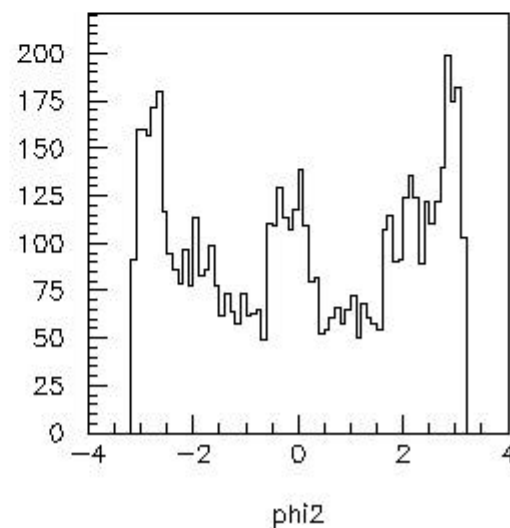
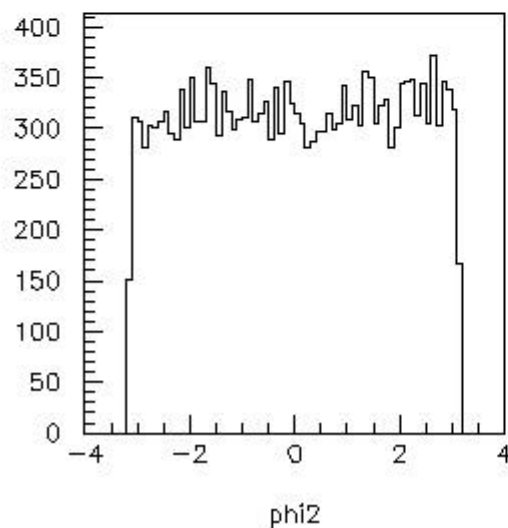


Phi angle, no svt M



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s
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$+\mu$ track

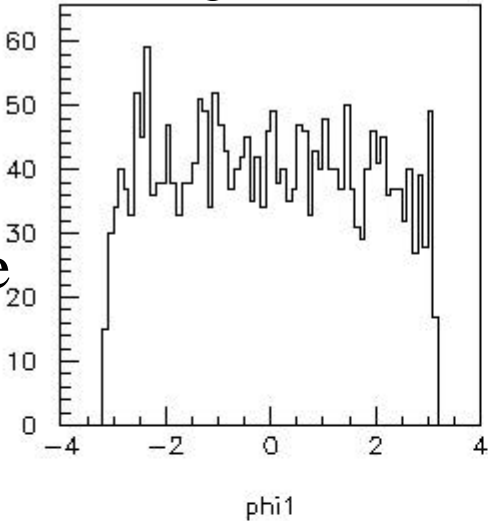


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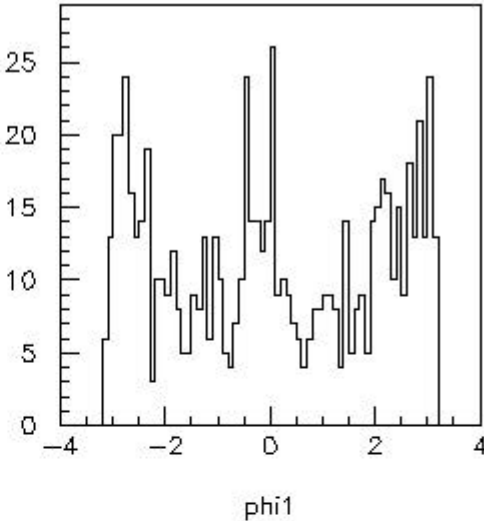
D* selection of events

K track candidate

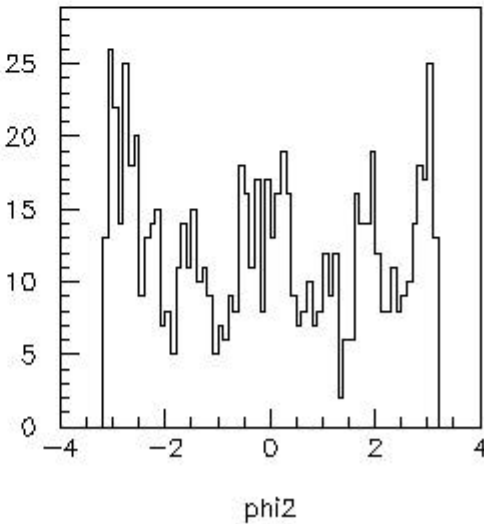
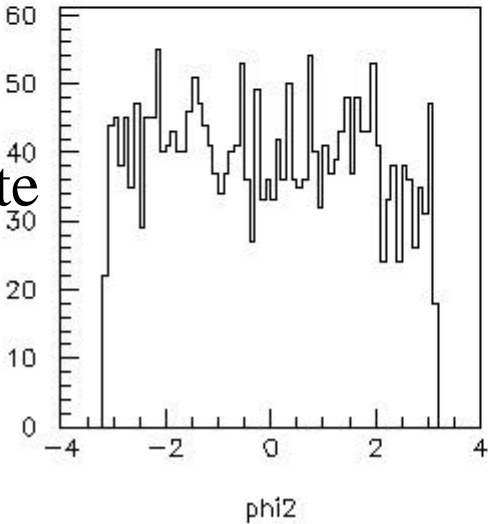
Phi angle, no cut



Phi angle, no svt



π track candidate



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